

## Claims:

1. A vaccine composition comprising polyoxyethylene ether or a polyoxyethylene ester, in combination with a pharmaceutically acceptable excipient, and an antigen or antigenic composition, wherein the polyoxyethylene ether or ester is not in the form of a vesicle.
2. A vaccine composition comprising a surfactant of formula (I):  
$$\text{HO}(\text{CH}_2\text{CH}_2\text{O})_n\text{-A-R}$$
wherein, n is 1-50, A is a bond or -C(O)-, R is C<sub>1-50</sub> alkyl or Phenyl C<sub>1-50</sub> alkyl; a pharmaceutically acceptable excipient, and an antigen or antigenic composition, wherein the surfactant is not in the form of a vesicle.
3. A vaccine composition as claimed in claim 2, comprising a surfactant of formula (I), wherein n is 4-24.
4. A vaccine composition as claimed in claim 2, comprising a surfactant of formula (I), wherein n is 9.
5. A vaccine composition as claimed in any one of claims 2 to 4, comprising a surfactant of formula (I), wherein R is C<sub>8-20</sub> alkyl or Phenyl C<sub>8-20</sub> alkyl.
6. A vaccine composition as claimed in any one of claims 2 to 4, comprising a surfactant of formula (I), wherein R is C<sub>12</sub> alkyl or Phenyl C<sub>12</sub> alkyl.
7. A vaccine composition as claimed in any one of claims 2 to 6, comprising a surfactant of formula (I), wherein A is a bond, thereby forming an ether.
8. A vaccine composition as claimed in any one of claims 2 to 6, comprising a surfactant of formula (I), wherein A is -C(O)-, thereby forming an ester.
9. A vaccine composition as claimed in claim 1, comprising a polyoxyethylene ether or ester, selected from polyoxyethylene-9-lauryl ether, polyoxyethylene-9-lauryl ester, polyoxyethylene-9-stearyl ether, polyoxyethylene-8-stearyl ether, polyoxyethylene-4-lauryl ether, polyoxyethylene-35-lauryl ether, polyoxyethylene-23-lauryl ether.
10. A vaccine composition as claimed in claim 2, comprising a surfactant selected from polyoxyethylene-9-lauryl ether, polyoxyethylene-9-lauryl ester, polyoxyethylene-9-stearyl ether, polyoxyethylene-8-stearyl ether, polyoxyethylene-4-lauryl ether, polyoxyethylene-35-lauryl ether, polyoxyethylene-23-lauryl ether.

11. A vaccine composition as claimed in any one of claims 1 to 10, wherein the concentration of the surfactant is in the range 0.1-10%.
12. A vaccine composition as claimed in any one of claims 1 to 10, wherein the concentration of the surfactant is in the range 0.25-1%.
13. A vaccine composition as claimed in any one of claims 1 to 12, wherein the antigen or antigen composition is derived from the group comprising: Human Immunodeficiency Virus, Varicella Zoster virus, Herpes Simplex Virus type 1, Herpes Simplex virus type 2, Human cytomegalovirus, Dengue virus, Hepatitis A, B, C or E, Respiratory Syncytial virus, human papilloma virus, Influenza virus, Hib, Meningitis virus, Salmonella, Neisseria, Borrelia, Chlamydia, Bordetella, Streptococcus, Mycoplasma, Mycobacteria, Haemophilus, Plasmodium or Toxoplasma, stanworth decapeptide; or Tumor associated antigens (TMA), MAGE, BAGE, GAGE, MUC-1, Her-2 neu, LnRH, CEA, PSA, KSA, or PRAME.
14. A vaccine composition as claimed in any one of claim 1 to 13, further comprising other adjuvants.
15. A vaccine composition as claimed in any one of claim 1 to 13, further comprising other adjuvants selected from the group comprising: LT, CT, MPL, CpG, QS21.
16. A vaccine composition as claimed in claim 15, wherein the CpG adjuvant is: TCC ATG ACG TTC CTG ACG TT.
17. A vaccine composition as claimed in any one of claim 1 to 16, further comprising a vehicle, said vehicle comprising of any one of the following group: chitosan or other polycationic polymers, polylactide and polylactide-co-glycolide particles, particles composed of polysaccharides or chemically modified polysaccharides, or particles composed of glycerol monoesters.
18. Use of a polyoxyethylene ether or ester, in the manufacture of an adjuvant composition, wherein the polyoxyethylene ether or ester is present in the adjuvant composition in a non-vesicular form.
19. Use of a surfactant of general formula (I), in the manufacture of an adjuvant composition, wherein the surfactant of general formula (I) is present in the adjuvant composition in a non-vesicular form.

20. Use of vaccine composition as defined in any of claims 1 to 17, for the manufacture of a vaccine for the treatment of viral, bacterial, parasitic infections, allergy, or cancer.
21. A method of treating a mammal suffering from or susceptible to a pathogenic infection, or cancer, or allergy, comprising the administration of a safe and effective amount of a composition according to any of claims 1 to 17.
22. A method of treating a mammal suffering from or susceptible to a pathogenic infection, or cancer, or allergy, comprising the mucosal administration of a safe and effective amount of a composition according to any of claims 1 to 17.
23. A method of treating a mammal suffering from or susceptible to a pathogenic infection, or cancer, or allergy, comprising the intranasal administration of a safe and effective amount of a composition according to any of claims 1 to 17.
24. A process for making a vaccine composition according to claim 1, comprising admixing a polyoxyethylene ether or ester, a pharmaceutically acceptable excipient, and an antigen or antigenic composition.
25. A process for making a vaccine composition as claimed in any one of claims 2 to 17, comprising admixing a surfactant of general formula (I), a pharmaceutically acceptable excipient, and an antigen or antigenic composition.
26. An adjuvant composition comprising polyoxyethylene ether or ester, and a pharmaceutically acceptable excipient, characterised in that said adjuvant composition is not in the form of a vesicle.
27. A vaccine or adjuvant as claimed herein for use as a medicament.